

Weight	W	Newtons(N)	vector ↓
mass	m	kg	Scalar

gravity	g	m/s^2	vector ↓
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Force	F	Newtons(N)	Vector
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acceleration	a	m/s^2	Vector
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w

$50\text{ N} \downarrow$ OR "DOWN" ~~50 kg~~

m

25 kg

g

$9.8\text{ m/s}^2 \downarrow$

F

$20\text{ N} \rightarrow$

a

$5\text{ m/s}^2 \rightarrow$

Deliver pizza to mercury
pizza has a mass of 2kg
What is its weight on mercury

Data

$$g_{\text{merc}} = 3.6 \text{ m/s}^2 \quad W = ?$$

$$m = 2 \text{ kg}$$

Equation

$$W = mg$$

Substitution

$$W = \underline{mg} = (2 \text{ kg}) 3.6 \text{ m/s}^2$$

$$W = 7.2 \text{ N} \downarrow$$

What is the pizza's weight
ON SATURN.

$$g_{\text{sat}} = 11.1 \text{ m/s}^2 \downarrow$$

Data
Equation
Substitution
Answer
UNITS/DIR